

F-35 Lightning II Program Status and Fast Facts

Program Status

- As of September 5, 2011, the F-35 flight test program has conducted 1,154 System Development and Demonstration (SDD) flights total, including AA-1 (the original flight test aircraft) and 607 flights in 2011.
- BF-1 performed a 40 foot hover in calm winds and two vertical landings (VL) for the 150th vertical landing to date on Aug. 31, 2011.
- AF-10 and AF-11 delivered to Eglin AFB, Fla., on Aug. 31, 2011. They join AF-8 and AF-9 assigned to the 33rd Fighter Wing.
- Static testing was completed on the F-35C Lightning II carrier variant (CV) ground article CG-1 at Lockheed Martin Fort Worth, Texas on Aug. 29, 2011. With this achievement, the F-35 Program has accomplished its static structural testing milestone for 2011.
- Jet Blast Deflector (JBD) testing was completed by F-35C Lightning II carrier variant (CV) aircraft CF-2 at Joint Base McGuire-Dix-Lakehurst, N.J. from June 25-August 13, 2011. CF-2 successfully completed this portion of JBD tests required to ensure the F-35C is compatible aboard an aircraft carrier.
- AF-6 and AF-7 commenced Maturity Flight testing of the training syllabus software at Edwards AFB. This software will be used for training at Eglin AFB this fall.
- Cumulative flight test activity totals as of Sept. 5, 2011 are provided below:
 - F-35A conventional takeoff and landing (CTOL) jets have flown 294 times.
 - F-35B short takeoff/ vertical landing (STOVL) aircraft have completed 217 flights.
 - F-35C carrier variant (CV) jets have flown 96 times.
- AF-7 completed last flight of currently required CTOL maturity flights on Aug. 31, 2011.
- Flew most flights on one day in program history (10) on May 25, 2011.

System Development and Demonstration (SDD) and Low Rate Initial Production (LRIP)

Six Jets at Edwards AFB, Calif.

- AF-1 – FF Nov. 14, 2009; Ferry May 17, 2010
- AF-2 – FF April 20, 2010; Ferry May 17, 2010
- AF-3 – FF July 6, 2010; Ferry Dec. 11, 2010
- AF-4 – FF Dec. 30, 2010; Ferry Jan. 22, 2011
- AF-6 – FF Feb. 25, 2011; DD250: May 12, 2011; Ferry May 13, 2011
- AF-7 – FF March 4, 2011; DD250: May 5, 2011; Ferry May 6, 2011

Eight Jets at Naval Air Station Patuxent River, Md.

- BF-1 – FF June 2008; Ferry Nov. 15, 2009; First VL March 18, 2010
- BF-2 – FF Feb. 25, 2009; Ferry Dec. 29, 2009; First VL Jan. 26, 2011
- BF-3 – FF Feb. 2, 2010; Ferry Feb. 17, 2010; First VL April 29, 2011
- BF-4 – FF April 6, 2010; Ferry June 7, 2010; First VL April 27, 2011
- BF-5 – FF Jan. 27, 2011; Ferry July 16, 2011
- CF-1 – FF June 6, 2010; Ferry Nov. 6, 2010
- CF-2 – FF April 29, 2011; Ferry May 16, 2011
- CF-3 – FF May 21, 2011; Ferry June 2, 2011

Current as of September 5, 2011

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Four Jets at Eglin AFB, Fla.

- AF-8 – FF May 6, 2011; DD250: July 17, 2011; Ferry July 20, 2011
- AF-9 – FF May 13, 2011; DD250: July 8, 2011; Ferry July 14, 2011
- AF-10 – FF June 29, 2011; DD250: Aug. 15, 2011; Ferry Aug. 31, 2011
- AF-11 – FF July 1, 2011; DD250: Aug. 2, 2011; Ferry Aug. 31, 2011

Two Jets Currently Flying in Fort Worth (will ferry to Eglin AFB in 2011)

- AF-12 – FF July 8, 2011
- AF-13 – FF July 14, 2011

FF = first flight; VL = vertical landing; DD250 = contractual delivery

F-35 Cooperative Avionics Test Bed (CATB)

- The F-35 Cooperative Avionics Test Bed (CATB), is a highly modified 737-300 aircraft originally designed to integrate, test and validate the entire F-35 Lightning II sensor suite before it ever flies in an F-35 aircraft.
- The CATB recently completed the last of the major mission systems modification periods on April 21, 2011 and is now configured with the full F-35 sensor suite.
- CATB began integration and testing of Block 2 software on June 14, 2011 as the principle development venue.
- CATB is configured with data links to support key sensor and fusion capability enhancements incorporated in Block 2.
- The CATB team is currently conducting software ground testing in Fort Worth and will transition to flight testing in August 2011.

F-35 Autonomic Logistics and Global Sustainment (ALGS) system

- F-35 Autonomic Logistics Information System Operations Center is now operational and supporting both flight test and production aircraft.

Funding

- Long-lead funding approved for Low Rate Initial Production (LRIP) lot 5 (approx 35 aircraft)
- Full funding approved for LRIP lot 4 (31 aircraft, with an option for one Netherlands F-35A)
- Full funding approved for LRIP lot 3 (17 aircraft)
- Full funding approved for LRIP lot 2 (12 aircraft)
- Full funding approved for LRIP lot 1 (2 aircraft)

International Partners and Planned Quantities

- USAF 1,763
- USN/USMC 680
- U.K. RAF/RN 138
- Italy 131
- Netherlands 85
- Turkey 100
- Australia 100
- Norway 48
- Denmark 30
- Canada 65

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2010 Estimated Average Unit Recurring Flyaway Cost

- F-35A CTOL \$65 million

Decisions

- The Norwegian Parliament unanimously approved the funding of four (4) F-35 Lightning II training jets to begin fulfilling Norway's future air-combat capability requirements. (June 21, 2011)
- The Dutch Parliament made a decision and agreed to procure a second test F-35 Netherlands aircraft for inclusion in the test and evaluation phase of SDD. (April 2011)
- Following the Israeli Government decision to select the F-35 as the Israel Air Force's next-generation fighter aircraft, Israeli Ministry of Defense Director General (Maj. Gen. Ret.) Udi Shani on Oct. 7 signed the Letter of Offer and Acceptance for the procurement of the F-35 aircraft. (October 2010)
- Canada announced its selection of the F-35 to fulfill its future fighter requirements. (July 2010)
- The Joint Combat Aircraft program announced that the United Kingdom has received financial approval to purchase its third F-35B operational test aircraft. (Dec. 2009)
- The Australian government made the decision to purchase 14 F-35 aircraft. (Nov. 2009)
- The Norwegian Parliament has decided to support the government's recent decision to replace its F-16 aircraft with 56 F-35 aircraft. The quantity is higher than the 48 aircraft originally planned. (June 2009)
- Dutch parliament made a decision and agreed to procure one test F-35 Netherlands aircraft for inclusion in the test and evaluation phase of SDD. (Apr. 2009)
- The Italian Parliament approved the Ministry of Defence plan to enter into the next phase of their involvement in the program, including the purchase of 131 F-35 aircraft and construction of a final assembly facility at Cameri Air Base. (Apr. 2009)

F-35 Specifications

	F-35A CTOL	F-35B STOVL	F-35C CV
Length	51.4 ft / 15.7 m	51.2 ft / 15.6 m	51.5 ft / 15.7 m
Height	14.4 ft / 4.38 m	14.3 ft / 4.36 m	14.7 ft / 4.48 m
Speed (full internal weapons load)	Mach 1.6 (~1,200 mph)	Mach 1.6 (~1,200 mph)	Mach 1.6 (~1,200 mph)
Wingspan	35 ft / 10.7 m	35 ft / 10.7 m	43 ft / 13.1 m
Wing area	460 ft ² / 42.7 m ²	460 ft ² / 42.7 m ²	668 ft ² / 62.1 m ²
Horizontal tail span	22.5 ft / 6.86 m	21.8 ft / 6.65 m	26.3 ft / 8.02 m
Combat radius (internal fuel)	>590 nm / 1,093 km	>450 nm / 833 km	>600 n.mi / 1,100 km
Range (internal fuel)	>1,200 nm / 2,200 km	>900 nm / 1,667 km	>1,200 n.mi / 2,200 km
Internal fuel capacity	18,250 lb / 8,278 kg	13,500 lb / 6,125 kg	19,750 lb / 8,960kg
Weight empty	29,300 lb	32,300 lb	34,800 lb
Maximum weight	70,000 lb class	60,000 lb class	70,000 lb class
Max g-rating	9.0	7.0	7.5
Weapons payload	18,000 lb / 8,160 kg	15,000 lb / 6,800kg	18,000 lb / 8,160 kg
Standard internal weapons load	<ul style="list-style-type: none"> • 25 mm GAU-22/A cannon • Two AIM-120C air-to-air missiles • Two 2,000-pound GBU-31 JDAM guided bombs 	<ul style="list-style-type: none"> • Two AIM-120C air-to-air missiles • Two 1,000-pound GBU-32 JDAM guided bombs 	<ul style="list-style-type: none"> • Two AIM-120C air-to-air missiles • Two 2,000-pound GBU-31 JDAM guided bombs

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